The Quality Management System
of the Finnish Vessel Traffic Services

Finnish Transport Agency (FTA)

Vessel Traffic Services in Finland

Vessel Traffic Services in Finland

Legislation

- Vessel Traffic Service Act 623/2005

- Government Decree on Vessel Traffic Service 763/2005

Authorities

- Competent authority: the Ministry of Transport and Communications

- VTS authority: the Finnish Transport Agency
  - → Traffic and Information (Division)
    - → Traffic Management Centres (Department)
      - → Vessel Traffic Services (Unit)
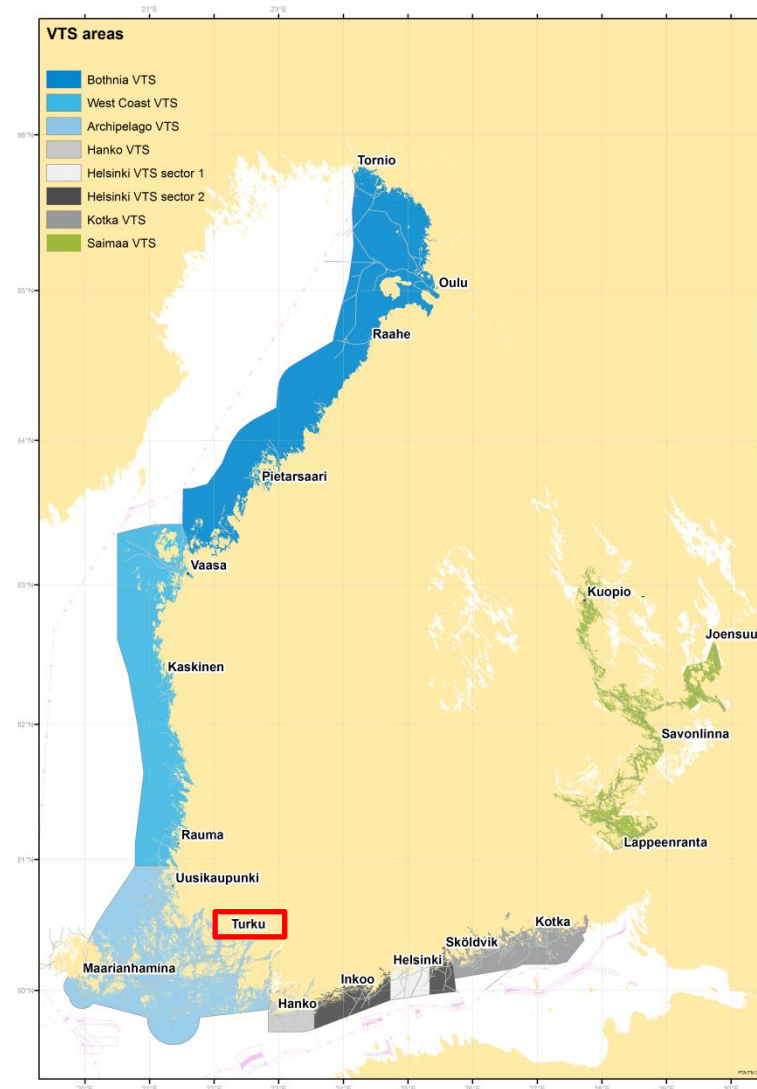
Vessel Traffic Services in Finland

- Vessel Traffic Services
- The Mandatory Ship Reporting System in the Gulf of Finland (GOFREP)
- Traffic Separation Schemes in the Gulf of Finland and the Åland Sea
  - applied in international waters together with Finland's neighbouring countries.
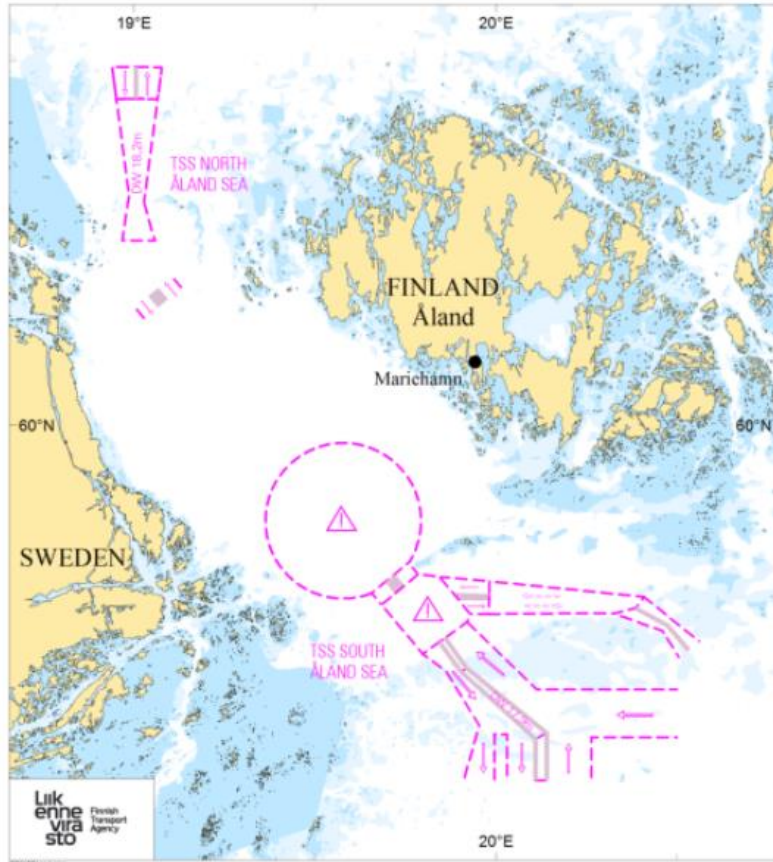- Safety Radio Communications

Western Finland Vessel Traffic Centre

- Location: Turku
- Tasks:
  - Bothnia VTS
  - West Coast VTS
  - Archipelago VTS
  - Åland Sea TSS
  - Turku Radio
- Bothnia VTS, West Coast VTS and Archipelago VTS provide all three services (information, traffic organization and navigational assistance).

VTS areas

- Bothnia VTS
- West Coast VTS
- Archipelago VTS
- Hanko VTS
- Helsinki VTS sector 1
- Helsinki VTS sector 2
- Kotka VTS
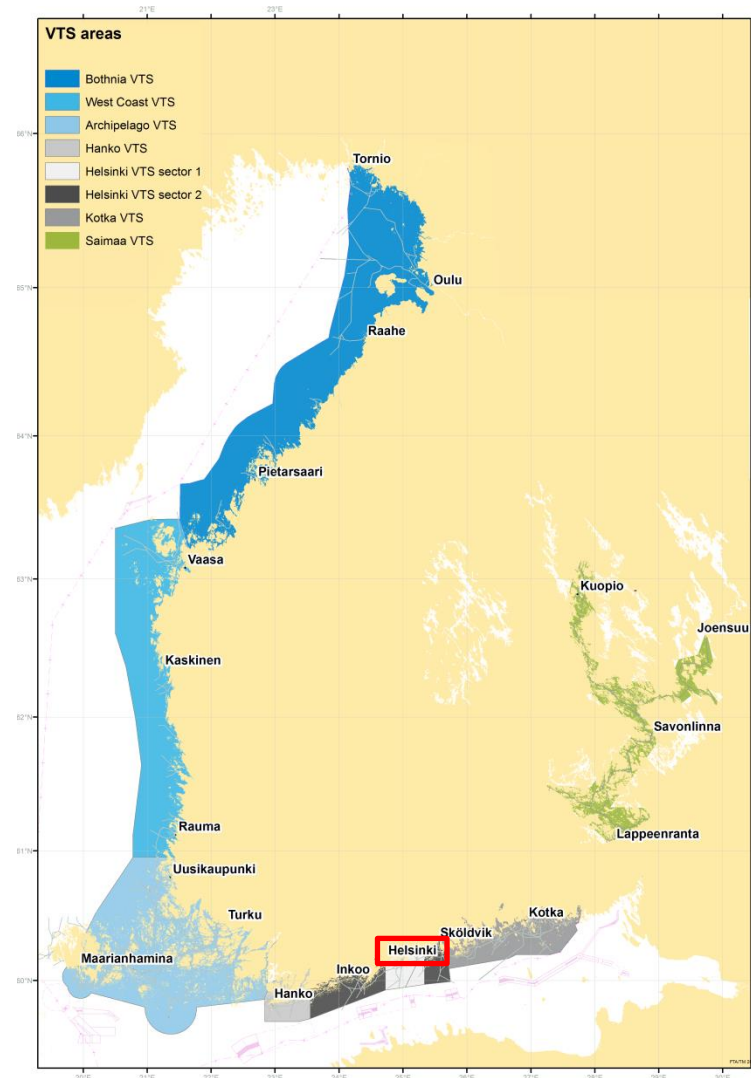- Saimaa VTS

Åland Sea TSS

- Finland, in cooperation with Sweden, has established a Traffic Separation Scheme in the Åland Sea (Åland Sea TSS).

- Vessel traffic is monitored by the Western Finland Vessel Traffic Centre.

- There is no mandatory ship reporting system in the area, but all vessel traffic is monitored and vessels and flag states are notified of any violations.

Turku Radio

- The Finnish Transport Agency is responsible for ensuring maritime safety and distress radio communications in Finland.

- Turku Radio handles the coastal safety and distress radio operations throughout the year.

MERENKULUN TURVALLISUUSRADIOVERKON TUKIASEMAPAIKAT JA KANAVAT 1.1.2010
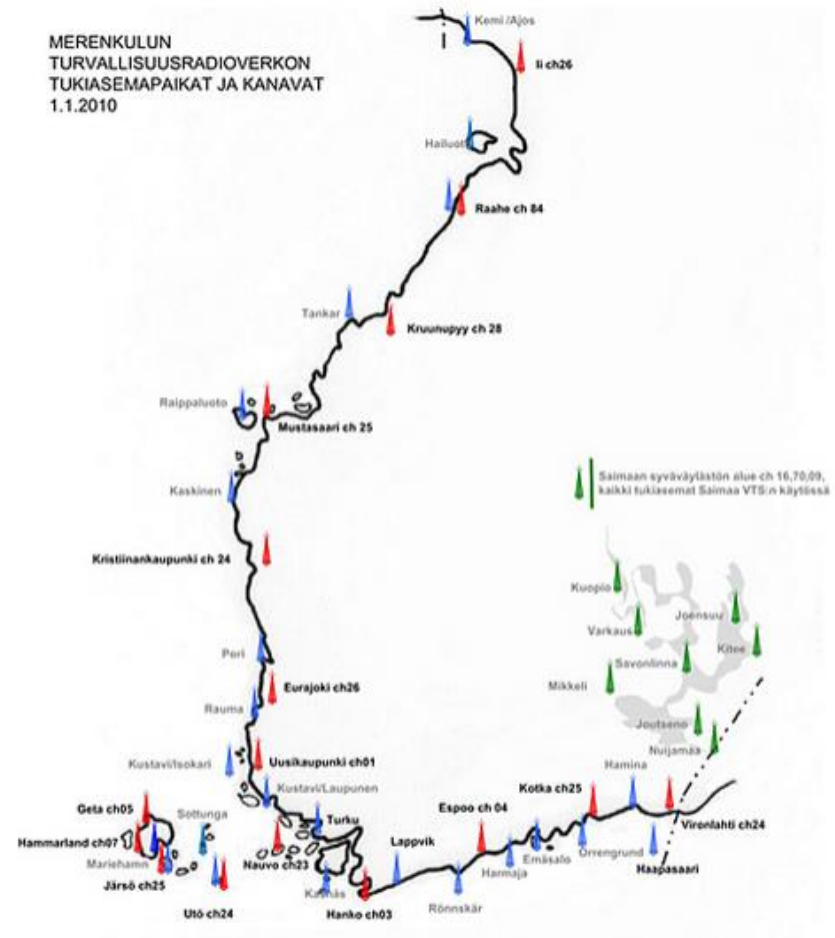
Gulf of Finland Vessel Traffic Centre

- Location: Helsinki
- Tasks:
  - Hanko VTS
  - Helsinki VTS
  - Kotka VTS
  - GOFREP
- Hanko VTS, Helsinki VTS and Kotka VTS provide all three services (information, traffic organization and navigational assistance).

VTS areas
- Bothnia VTS
- West Coast VTS
- Archipelago VTS
- Hanko VTS
- Helsinki VTS sector 1
- Helsinki VTS sector 2
- Kotka VTS
- Saimaa VTS

GOFREP

- Under regulation V/11 of the SOLAS Convention and jointly with Estonia and Russia, Finland has established a Mandatory Ship Reporting System in the Gulf of Finland.

- Tasks of the GOFREP:
  - to monitor the traffic and the traffic separation schemes in the area;
  - to ensure that vessel traffic complies with the international rules of the road at sea (COLREG);
  - to maintain an updated SRS database.
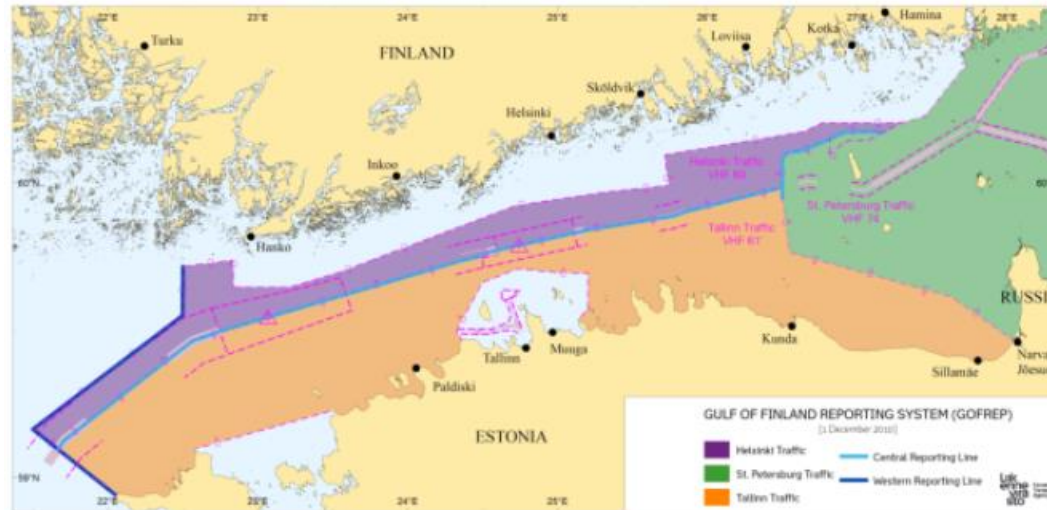
Saimaa VTS

- Location: Lappeenranta
- Tasks:
  - Saimaa VTS
- Saimaa VTS only provides information service.
- Saimaa VTS operates the maritime safety and distress radio communications in the deep channels of the Lake Saimaa area.
- Saimaa VTS does not operate off season.
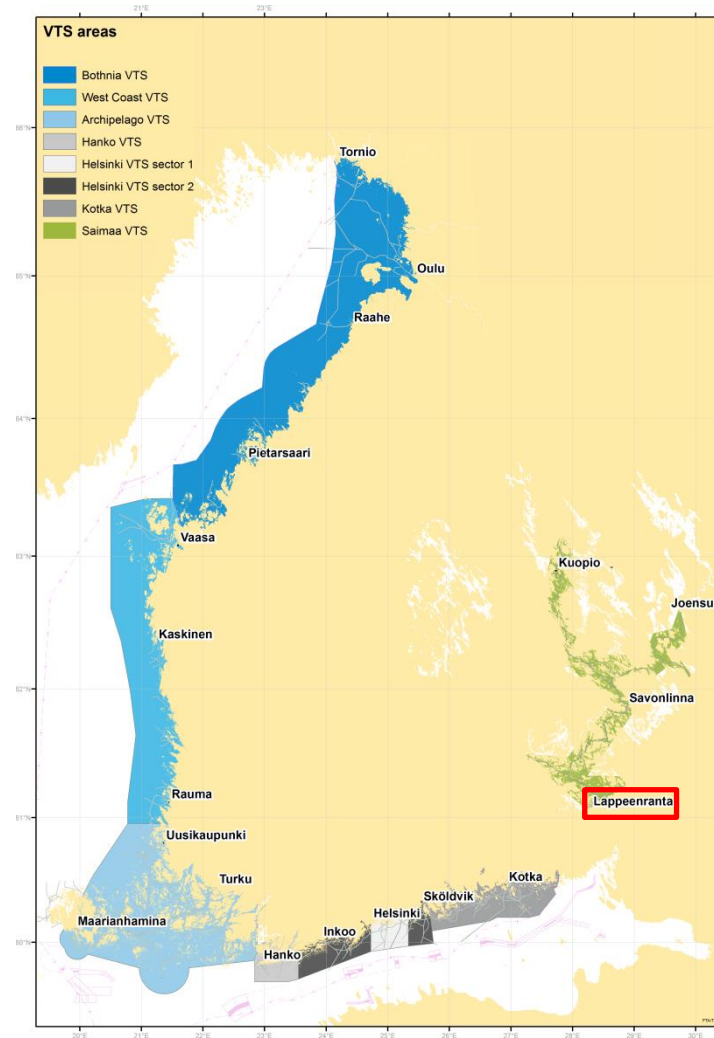
A description of
the Quality Management System

Quality Management System

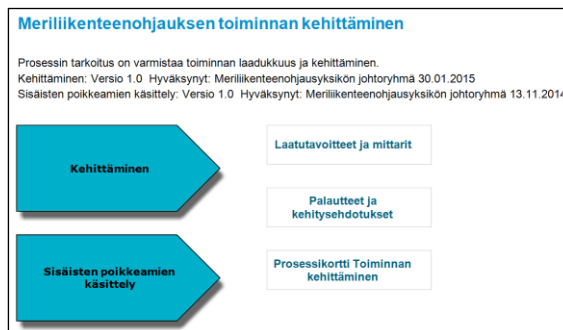- The Quality Management System is applied to the Finnish Transport Agency's Vessel Traffic Services Unit.

- The Quality Management System is created and maintained in accordance with the ISO 9001:2008 standard.
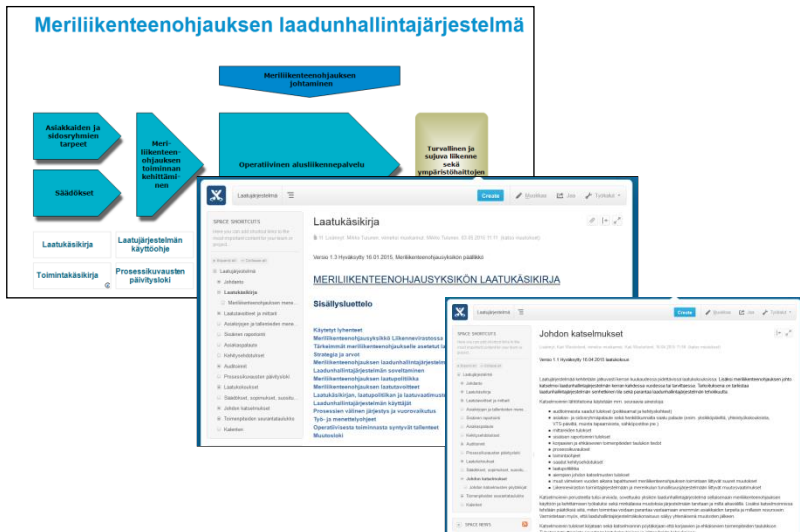
Quality Management System

- The purpose of the Quality Management System is
  - to create a comprehensive overview of Vessel Traffic Services;
  - to assist Vessel Traffic Services in carrying out its legal obligation;
  - to harmonize the operations between different VTS centres;
  - to ensure uniform quality of services in all of Finland's VTS centres, regardless of the VTS Operators on duty;
  - to commit to the continuous development of Vessel Traffic Services; and
  - to coordinate Vessel Traffic Services and closely related services in a manner that is well adapted to its purpose.

Use of the System
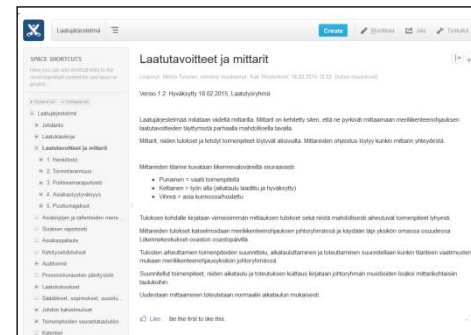
- The working instructions are defined in the Operating Manual according to section 19 of the Vessel Traffic Service Act…

- … whereas the Quality Management System is intended to be a tool for aiding day-to-day Vessel Traffic Services operations, such as quickly finding work instructions and required documents.

- The QM System allows for the management of Vessel Traffic Services to develop and improve Vessel Traffic Services operations.

- The QM System intends to present Vessel Traffic Services operations as clearly and logically as possible for the familiarization of new VTS Operators and other people working in Vessel Traffic Services.

Structure of the System

- The Quality Management System is created in electronic form.
- The Quality Management System comprises
  - a quality manual
  - documents and records defined in the system, e.g. working instructions
  - the Quality System section on the portal VTS Laituri ('Quay')
  - process descriptions in the QPR system
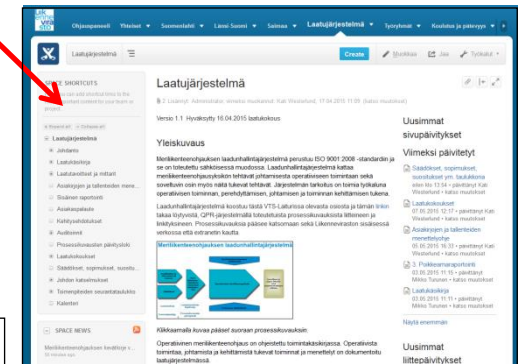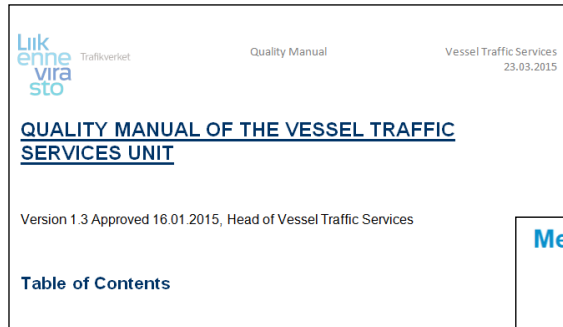
QM System on the Portal VTS Laituri

- Part of the Quality Management System is situated on the Portal VTS Laituri ('Quay').

- It comprises a large part of the text sections of the system, e.g.
  - Quality Manual
  - Quality targets and quality target metrics
  - Customer feedback
  - Audit materials
  - Meeting materials
  - Instructions related to the Quality Management System
  - Some materials supporting the work of VTS Operators
  - Documented responsibilities

Example of a text page on the portal VTS Laituri

Principle: one procedure per page. Described as shortly as possible.

Link to another procedure mentioned in the text.

Link to an electronic form which can be used in this procedure.

Link to a table on another page.

Process Descriptions in the QPR System

- Another part of the Quality Management System is included in the QPR System.

- It comprises all process descriptions of Vessel Traffic Services, e.g.
  - Operational processes of Vessel Traffic Services
  - Development of operations
  - Regulations
  - Management
  - Operational requirements and resources
  - Customer and stakeholder needs

Meriliikenteenohjauksen laadunhallintajärjestelmä

Meriliikenteenohjauksen johtaminen

Asiakkaiden ja sidosryhmien tarpeet

Meri-liikenteen-ohjauksen toiminnan kehittämi-nen

Säädökset

Operatiivinen alusliikennepalvelu

Turvallinen ja sujuva liikenne sekä ympäristöhaittojen ehkäisy

Toiminnan edellytykset

Laatukäsikirja

Laatujärjestelmän käyttöohje

Toimintakäsikirja

Prosessikuvausten päivitysloki

Process descriptions in the QPR System

- The processes are divided into different layers and pictures according to the subjects.
- It is possible to navigate by clicking the boxes.
- Example of operational processes:

2. Second layer: operational processes are divided into two groups.

4. Process description of one type of procedure.

1. Front page.

3. Third layer: processes are further divided into two groups.

Example of a process description of providing Vessel Traffic Services

Link to a relevant working instruction.
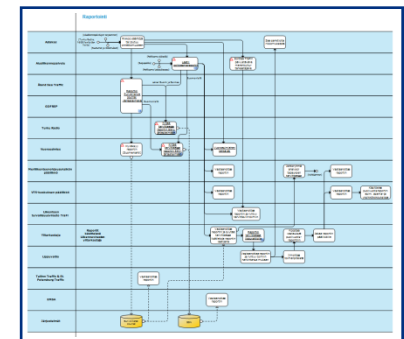
Link to a relevant website.

Link to another process description.

Process description illustrated as a flow chart.

By clicking a box it is possible to view additional information at the bottom of the page.

Building the
Quality Management System

How we made it?

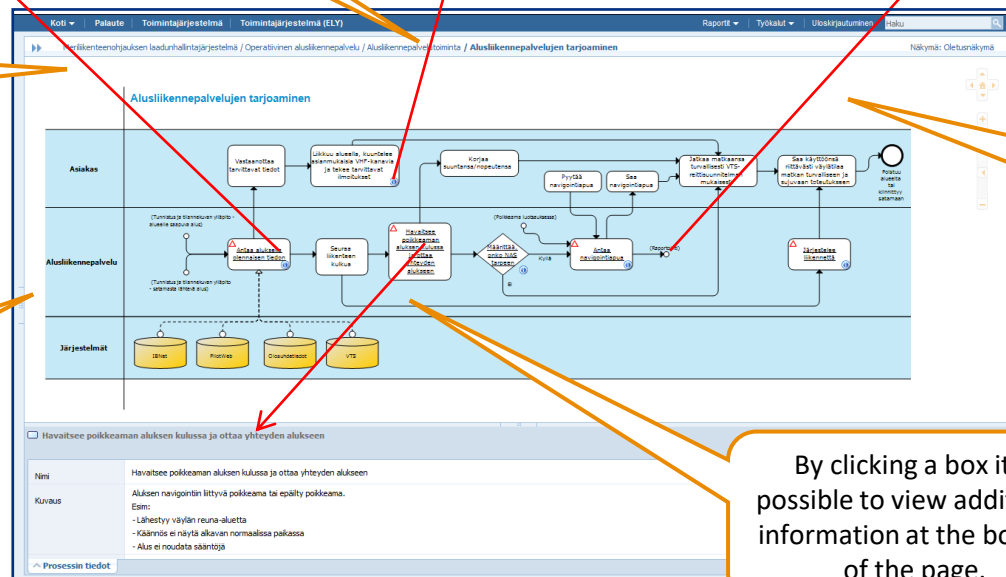1. We started by describing the operational processes as they are at present. The help of a Quality Working Group (consisting of VTS operators from every VTS centre) was valuable. Working instructions of different VTS centres were integrated into joint working instructions for all VTS centres.

2. The next step was to describe other existing procedures (the relevant ones according to the ISO 9001). Some of them were developed to meet the requirements of ISO 9001.

3. The rest of procedures required by ISO 9001 were created and described.

4. An internal audit was arranged in order to see if the QMS was ready for use and to meet the requirements of ISO 9001.

5. The personnel of the Vessel Traffic Services unit was educated on how and when to use the QMS.

6. The QMS was taken into use step by step and the new procedures were tested in practice. Some of them has been improved since then and unnecessary bureaucracy has been lightened.

7. The QMS was audited in order to get an ISO 9001 certificate.

8. The development of the QMS continues as long as it is in use.

How we made it?

- Some good principles on building a practical Quality Management System
  - Do not to add unnecessary workload of VTS operators; on the contrary, the aim of the system is to support their work.
  - Keep the entire system as simple as possible.
  - Minimize bureaucracy (simple procedures).
  - Ensure the systematic execution of certain procedures.
  - Describe the processes and procedures as they are in reality instead of future visions or "dreams".
  - Act according the descriptions. If it does not work, change either your way of acting or the procedure itself.

Achieving the ISO 9001 certificate

- The ISO 9001:2008 certificate was achieved in February 2016. The QMS was audited by Inspecta.

- The next steps are…
  - to develop the QMS and the operations of VTS to meet the requirements of the new ISO 9001:2015 standard.
  - to continue the development of the system itself as well as the operation of the Vessel Traffic Services unit by using the help of the QMS.
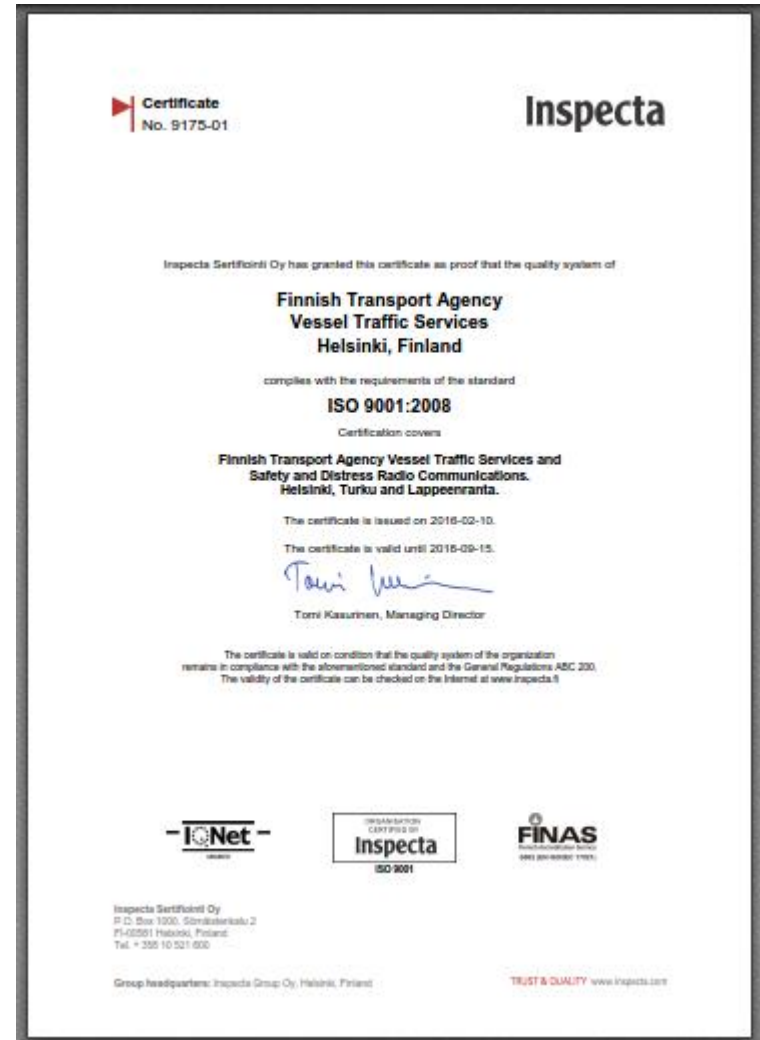
Thank you
for your attention!

For more information,
please visit us at
http://www.liikennevirasto.fi/web/en/merchant-shipping/vts.